

Amendment to the Claims

Claims 1-11 (Cancelled)

12.(New) A fluid dynamic bearing device comprising:

a sleeve having a bearing hole;

a shaft relatively rotatably inserted into the bearing hole;

and

a thrust bearing member fixed to an end face of the sleeve

and making contact with one end face of the shaft,

wherein a thrust-side dynamic pressure generating groove is provided in at least one of the one end face of the shaft and the thrust bearing member,

wherein at least two radial-side dynamic pressure generating grooves for performing an action of making a lubricant flow to the thrust bearing member are provided in at least one of an inner circumferential surface of the bearing hole of the sleeve and an outer circumferential surface of the shaft, and a lubricant pool portion, which is larger than a clearance between the sleeve and the shaft in the two dynamic pressure generating grooves and not confronting outside, is provided between the two dynamic pressure generating grooves, and

wherein a pressure regulating hole is provided at a central

portion of the one end face of the shaft confronting the thrust bearing member, and the pressure regulating hole communicates with the lubricant pool portion.

13.(New) A fluid dynamic bearing device comprising:

a sleeve having a bearing hole;

a shaft relatively rotatably inserted into the bearing hole;

and

a thrust bearing member fixed to an end face of the sleeve and making contact with one end face of the shaft,

wherein a thrust-side dynamic pressure generating groove is provided in at least one of the one end face of the shaft and the thrust bearing member,

wherein at least two radial-side dynamic pressure generating grooves for performing an action of making a lubricant flow to the thrust bearing member are provided in at least one of an inner circumferential surface of the bearing hole of the sleeve and an outer circumferential surface of the shaft, and a lubricant pool portion, which is larger than a clearance between the sleeve and the shaft in the two dynamic pressure generating grooves and not confronting outside, is provided between the two dynamic pressure generating grooves, and

wherein a pressure regulating hole is provided at an outer-circumference neighborhood portion of the thrust-side dynamic pressure generating groove of the one end face of the shaft confronting the thrust bearing member, and the pressure regulating hole communicates with the lubricant pool portion.

14.(New) A motor including the fluid dynamic bearing device as defined in Claim 12, wherein the sleeve or the shaft is rotated as part of a rotor.

15.(New) A motor including the fluid dynamic bearing device as defined in Claim 13, wherein the sleeve or the shaft is rotated as part of a rotor.

16.(New) A motor including the fluid dynamic bearing device as defined in Claim 12, wherein the pressure regulating hole is provided so that the lubricant of the lubricant pool portion can be moved toward the thrust plate by the dynamic pressure generating groove that is lower than the lubricant pool portion so as to be moved to a central portion of a thrust surface of the shaft, and then pass through the pressure regulating hole provided within the shaft to return to the lubricant pool portion .

17.(New) A motor including the fluid dynamic bearing device as defined in Claim 13, wherein the pressure regulating hole is provided so that the lubricant of the lubricant pool portion is made to flow toward the thrust plate by the dynamic pressure generating groove that is lower than the lubricant pool portion, so as to move to the outer-circumference neighborhood portion of the dynamic pressure generating groove of the one end face of the shaft, and pass through the pressure regulating hole provided within the shaft to return to the lubricant pool portion.

18.(New) A fluid dynamic bearing device comprising:

- a sleeve having a bearing hole;
- a shaft relatively rotatably inserted into the bearing hole;
- a sleeve holder surrounding the sleeve; and
- a thrust bearing member fixed to an end face of the sleeve holder and making contact with one end face of the shaft,

wherein a thrust-side dynamic pressure generating groove is provided in at least one of the one end face of the shaft and the thrust bearing member,

wherein at least two radial-side dynamic pressure generating grooves for performing an action of making a lubricant flow

to the thrust bearing member are provided in at least one of an inner circumferential surface of the bearing hole of the sleeve and an outer circumferential surface of the shaft,

wherein a lubricant pool portion, which is larger than a clearance between the sleeve and the shaft in the two dynamic pressure generating grooves and does not confront outside, is provided between the two dynamic pressure generating grooves,

wherein a narrow gap portion is provided between the sleeve and the thrust bearing member; and

wherein a pressure regulating hole is provided in the one end face of the sleeve confronting the thrust bearing member, the pressure regulating hole communicates with the lubricant pool portion, and the sleeve holder is made of a material that is smaller in linear expansion coefficient than the sleeve.

19.(New) A fluid dynamic bearing device according to Claim 18, wherein an axial length of the sleeve is set to not more than 20 mm, a clearance of the narrow gap portion is sized to 1/500 to 1/1000, compared with the axial length of the sleeve, and a difference in linear expansion coefficient between a material of the sleeve and the material of the sleeve holder is set to 5.0×10^{-6} to 10.0×10^{-6} .

20.(New) A motor including the fluid dynamic bearing device as defined in Claim 18, wherein the sleeve or the shaft is rotated as part of a rotor.

21.(New) A motor including the fluid dynamic bearing device as defined in Claim 19, wherein the sleeve or the shaft is rotated as part of a rotor.

22.(New) A motor including the fluid dynamic bearing device, as defined in Claim 19, wherein when a temperature of working environment of the fluid dynamic bearing device is changed, the narrow gap for adjusting the thrust pressure is changed by a difference in linear expansion coefficient between the sleeve and the sleeve holder in such a direction that a thrust floating amount is adjusted, in response to changes in thrust pressure due to increases and decreases of a viscosity of the lubricant.